Work Instruction: BWI-23-0003



Boss 270 Awning to Low Profile Roof Rack Installation

Important!

- 1. The following instructions apply to standard setups where the awing provides shade at the side and rear of the vehicle.
- 2. To suit a standard setup, left-hand-side and right-hand-side awnings must be mounted on the side of the vehicle specified by the awning description.
- 3. A left-hand-side awning is depicted throughout these instructions, mirror the instructions for a right-hand side mounted awning.
- 4. Any deviations from the subsequent fitting instructions must be approved by Boss Aluminium before proceeding.
- 5. All fasteners provided are of a specific grade and specification to suit the application, they must not be substituted! Replacements for any lost or damaged fasteners must be supplied or approved by Boss Aluminium before use.
- 6. Nyloc nuts must be replaced if fully installed and then removed.

	Standard Kit Contents				
Item No.	Description	Qty	lmage		
P1	Boss 270 Awning Bag	1	A District A		
P2	Boss 270 Awning	1			
	Optional Kit Contents (Sold Separately)				
P3	Awning to Roof Rack Mounting Bracket	2			
P4	Awning Mounting Plate	2			
P5	Loctite 243 Threadlocker 10ml	1	243 THEADLOCKER SUPER NUT LOCK Rection Income of the control of th		

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Optional Kit Contents

(Awning to Roof Rack Mounting Bracket & Awning Mounting Plate Fasteners, Sold Separately)







Part A Awning to Roof Rack Mounting Bracket (Item P3) to Awning Mounting Plate (Item P4)		Part B Boss 270 Awning (Item P2) to Awning to Awning Mounting Plate (Item P4) (Through 6mm Backing Plate at Hinge End)			
Item No.	Description	Qty	Item No.	Description	Qty
F1	M8 x 30 Cap Head Bolt	8	F2	M8 x 30 Hex Head Bolt	4
F6	M8 Spring Washer	8	F4	M8 Large Flat Washer	8
F5	M8 Small Flat Washer	8	F7	M8 Nyloc Nut	4
Boss 2	Part C 270 Awning (Item P2) to Awning to Awning Mou	unting Plate		Totals	
Item	(Item P4) (Front End)		Item		
Item No.	(Item P4) (Front End) Description	Qty	Item No.	Description	Qty
		Qty 4	_	Description M8 x 30 Cap Head Bolt	Qty 8
No.	Description		No.	<u> </u>	
No.	Description M8 x 25 Hex Head Bolt	4	No.	M8 x 30 Cap Head Bolt	8
No. F3	Description M8 x 25 Hex Head Bolt M8 Large Flat Washer	4 8	No. F1 F2	M8 x 30 Cap Head Bolt M8 x 30 Hex Head Bolt	8 4
No. F3	Description M8 x 25 Hex Head Bolt M8 Large Flat Washer	4 8	No. F1 F2 F3	M8 x 30 Cap Head Bolt M8 x 30 Hex Head Bolt M8 x 25 Hex Head Bolt	8 4 4
No. F3	Description M8 x 25 Hex Head Bolt M8 Large Flat Washer	4 8	No. F1 F2 F3 F4	M8 x 30 Cap Head Bolt M8 x 30 Hex Head Bolt M8 x 25 Hex Head Bolt M8 Large Flat Washer	8 4 4 8

Optional Kit Contents (Boss Low Profile Roof Rack Mounting Fasteners, Sold Separately)



Item No	Description	Qty	Item No.	Description	Qty
F3	M8 x 25 Hex Head Bolt	8	F6	M8 Spring Washer	8
F4	M8 Large Flat Washer	8	F8	M8 Spring Nut	8

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	Tools & Equipment (Not Included in Kit)				
Item No.	Description	Qty	Image		
T1	13mm Socket/Ratchet	1			
T2	13mm Spanner	1	2		
Т3	Permanent Marker		3 and a second		
T4	Tape Measure	1			
T5	Scissors or Shears	1			

Important!

- 1. To maximize the stability of the awning, the Awning to Roof Rack Mounting Brackets (Item P3) should be fitted to the very front and rear Unistrut rail of the roof rack. If it is impractical to do so, fit the brackets as far apart as possible, they should be no less than <u>1450mm</u> apart.
- 2. Ensure the bolts for the rear Awning Mounting Plate (Item P4) pass through the 6mm hinge reinforcement plate on the inside of the awning.
- 3. For correct orientation of a standard setup, the hinge end of the awning must be positioned at the rear of the vehicle.
- 4. The position of the rear Awning Mounting Plate (Item P4) determines the position of the awning along the length of the vehicle. Once the preferred position of the rear bracket is established and before proceeding with the rest of the installation, inspect the vehicle and ensure there are no obstructions that could interfere with the awning in the open and closed positions.

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1. Fit Awning to Roof Rack Mounting Bracket (Item P3) to Low Profile Roof Rack



- 1. Insert four (4) M8 Spring Nuts (Item F8) into the Unistrut rail at the very rear of the Boss Low Profile Roof Rack.
- 2. To do so, insert the nut into the slot with the spring facing down. Push the nut down to compress the spring, turn it 90 Degrees and release, the nut will then lock in place.



3. Slide the nuts in position along the length of the Unistrut to match the hole pattern of the Awning to Roof Rack Mounting Bracket (Item P3)



4. Set the Awning to Roof Rack Mounting Bracket (Item P3) over the Unitstrut / Spring Nuts.



5. Cover the thread of the M8 x 25 Hex Head Bolts (Item F7) with a generous amount of Loctite (Item P5)

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6. Loosely fit a M8 x 25 Hex Head Bolt (Item F7), M8 Spring Washer (Item 2) and M8 Large Flat Washer (Item 5) into the four (4) Spring Nuts

<u>Important:</u> Do not tighten the bolts until the awning is fitted to the roof rack brackets.

7. Repeat steps 1 to 6 for the front bracket.

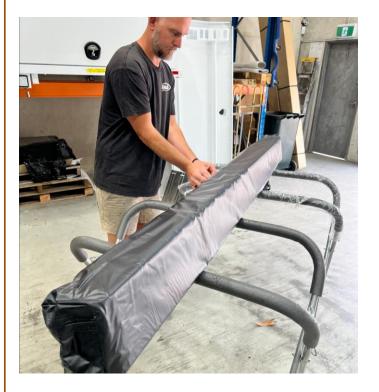
<u>Important:</u> Fit the brackets as far apart as possible, they should be no less than **1450mm** apart!

2. Fit Awning Mounting Plates (Item P4) to Boss 270 Awning (Item P2)



1. Measure and record the centre-to-centre distance between the Awning to Roof Rack Mounting Brackets (Item P3).

Centre-to-Centre (mm) =



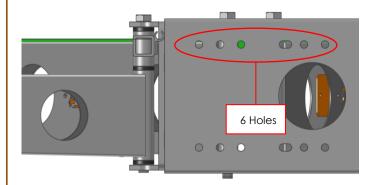
- 2. Ensure the awning is oriented correctly in the bag, the 'Boss Aluminium' logo must be located at the front end of the awning.
- 3. Ensure the awning and bag are fully aligned, remove any twists or creases along the length of the bag.
- 4. Locate the hinge end of the awning and pull the bag towards it so that the front end of the bag is approximately 10mm from touching the front of the awning.

<u>Tip:</u> It is easier to slide and align the awning while the bag is zipped up.

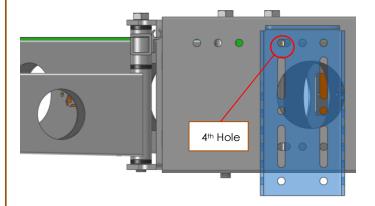
5. Carefully flip the awning onto the front face.

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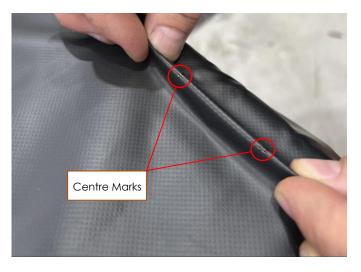
6. Feeling through the bag, locate the group of 6 holes at the top of the back face of the awning as shown.



7. Position the Awning Mounting Plate (Item P4) over the 4th hole from the hinge end of the awning and align the bracket to the other 3 hole/slots in the group as shown.



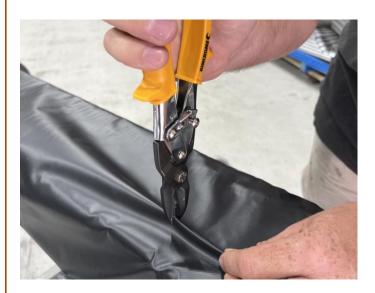
8. With a permanent marker, mark the centres of the two holes and two slots as shown.



9. Remove the bracket and pinch the bag with the crest crossing through the hole centre marks as shown.

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10. At each hole centre mark, cut approximately 5mm down from the crest of the fold to create an 10mm slit in the bag.





11. Cut another 10mm slit perpendicular to the last at each centre mark to form a cross slit.



12. With the awning flipped up-side-down, unzip the bag, and partially open the awning to gain access to the Awning Mounting Plate (Item P4) mounting holes.

<u>Important:</u> Ensure the awning arms are supported when open.

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13. Feed four (4) M8 x 30 Hex Head Bolts (Item F2) through the hinge end of the awning and bag as shown.

<u>Important:</u> Ensure the bolts pass through the 6mm hinge reinforcement plate on the inside of the awning.

<u>Do not mix up front and rear fasteners!</u> Shorter bolts are used on the front bracket as there is no 6mm reinforcement plate at the front end of the awning.

- 14. Fit the Awning Mounting Plate (Item P4), M8 Large Flat Washer (Item F4) and the M8 Nyloc Nut (Item F7) to the bolts, tighten using the 13mm socket and spanner.
- 15. Place the 2nd Awning Mounting Plate (Item P4) at the front of the awning and position the bracket using the same centre-to-centre measurement recorded in Step 1.
- 16. If there are no pre-drilled holes on the awning to match the position of the bracket, move it to closest hole set, the Awning to Roof Rack Mounting Brackets (Item P3) can be adjusted to suit.
- 17. Repeat Steps 8 to 11 for the front bracket.
- 18. Feed four (4) M8 x 25 Hex Head Bolts (Item F3) through the front end of the awning and bag as shown.
- 19. Fit the Awning Mounting Plate (Item P4), M8 Large Flat Washer (Item F4) and the M8 Nyloc Nut (Item F7) to the bolts, tighten using the 13mm socket and spanner.

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20. Pack up the awning for fitment to the vehicle.

Important: Ensure to secure the awning arms with the Velcro straps before zipping up the bag.

To avoid potential damage to canopy doors when open, terminate the zip at either end of the awning, not the centre.

3. Fit Awning Mounting Plate (Item P4) / Boss 270 Awning (Item P2) to Roof Rack Mounting Bracket (Item P3)



1. Adjust the width between the Awning to Roof Rack Mounting Bracket (Item P3) to match the width between the Awning Mounting Plates (Item P4) on the awning if required.



2. Cover the thread of the M8 x 30 Cap Head Bolts (Item F1) with a generous amount of Loctite (Item P5)

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3. Lift the awning onto the vehicle and fasten the Awning Mounting Plate (Item P4) to the front and rear Roof Rack Mounting Brackets (Item P3) with four (4) M8 x 30 Cap Head Bolts (Item F1), M8 Spring Washers (Item F6) and M8 Small Flat Washers (Item F5) per bracket.



4. Tighten the M8 x 25 Hex Head Bolts (Item F7) on both Awning to Roof Rack Mounting Brackets (Item P3).



5. Open the awning to check swing clearances.

Installation complete!

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